In the Claims

18. (currently amended) A circuit configuration for evaluating an acceleration sensor according to the Ferraris principle, comprising an inductive measurement head that interacts with a movable Ferraris disk, essentially via a main magneticizing field, and which supplies a variable that is dependent on acceleration, further comprising an additional direct-current magnetic field excitation circuit having means to cause the additional direct-current magnetic field to act compensatingly on an eddy-current field occurring from a higher rotational speed of the Ferraris disk compensation windings delivering a direct-current magnetic field compensating the occurring eddy-current field, said compensation windings being traversed by a direct current controlled by the additional direct-current magnetic field, further comprising a magnetic field sensor provided for measurement of a magnetic field in the sensor, said sensor outputting a signal for regulating the current through the compensation windings.

19. (currently amended) The circuit according to claim 18, wherein the magnetic field sensor is configured as a Hall sensor or XMR sensor.

20. (currently amended) The circuit according to claim 18, wherein, in terms of the measurement of the magnetic field sensor a Bmess in the eddy is regulable to a preassignable value, including zero.

21. (currently amended) The circuit according to claim 18, further comprising a detector coil to detect a voltage induced by the magnetic field of the acceleration sensor, including a field in eddy.

22. (currently amended) The circuit according to claim 18, wherein, a variable proportional to a voltage induced by the magnetic field of the acceleration sensor, in particular from the field in the eddy, is generated by a means of differentiating the said magnetic field.

23. (currently amended) The circuit according to claims 21 or 22, wherein the direct current yields a low-frequency component of the acceleration, and the voltage induced by the magnetic field of the acceleration sensor, in particular from the field in the eddy, or the variable proportional thereto, yields a high-frequency component of the acceleration, and the two signals are combinable to a broad-band acceleration signal.

24. (currently amended) The circuit according to claim 20, wherein, by addition of a measured value of the magnetic field sensor to the compensation current, a broad-band value proportional to the rotational speed is determinable.